

In the Claims:

Please add new claim 27 as follows:

1. (Previously presented) A liquid crystal display device in which a pair of substrates having electrodes face each other, and liquid crystal is sealed between the substrates,

said liquid crystal display device including an insulating layer that varies electric field orientations in a pixel region when a voltage is applied between the pair of substrates,

said insulating layer comprising a plurality of insulating patterns each having a dielectric constant different from a dielectric constant of a surrounding area surrounding at least one of said insulating patterns,

said plurality of insulating patterns controlling an in-plane direction of liquid crystal molecules in said liquid crystal when a voltage is applied across said electrodes.

2. (Cancelled)

3. (Previously presented) The liquid crystal display device as claimed in claim 1, wherein said plurality of insulating patterns are connected with each other by an insulating film in said surrounding area, and wherein each of said plurality of insulating patterns has a thickness different from a thickness of said insulating layer in said surrounding area.

4. (Original) The liquid crystal display device as claimed in claim 1, wherein the insulating layer is formed for each of the substrates, and the insulating layer of one of the substrates is arranged in a staggered state with the insulating layer of the other one of the substrates.

5. (Original) The liquid crystal display device as claimed in claim 1, wherein a vertical alignment layer is provided for each of the substrates, and the liquid crystal is a nematic liquid crystal with a negative dielectric constant.

6. (Original) The liquid crystal display device as claimed in claim 1, wherein the insulating layer is formed only on one of the substrates, and the electrode of the other one of the substrates is made narrower than the insulating layer.

7. (Original) The liquid crystal display device as claimed in claim 6, wherein a horizontal alignment layer is formed on each of the substrates, and the liquid crystal is a nematic liquid crystal with a positive dielectric constant.

8. (Original) The liquid crystal display device as claimed in claim 7, wherein the horizontal alignment layers of the pair of substrates are subjected to rubbing in predetermined directions.

9. (Original) The liquid crystal display device as claimed in claim 1, wherein an electric resistance of the insulating layer is higher than an electric resistance of the liquid crystal.

10. (Original) The liquid crystal display device as claimed in claim 1, wherein the electrode of one of the substrate is formed by a metal electrode and used as a reflecting plate.

11. (Previously presented) The liquid crystal display device as claimed in claim 1, wherein said plurality of insulating patterns are connected with each other by an insulating film in said surrounding area, and wherein each of the insulating patterns comprises a vertical alignment layer that has a thickness different from a thickness of said insulating layer in said surrounding area.

12. (Original) The liquid crystal display device as claimed in claim 1, wherein an impedance of the insulating layer is lower than an impedance of the liquid crystal or higher.

13. (Original) The liquid crystal display device as claimed in claim 1, wherein the insulating layer is striped.

14. (Original) The liquid crystal display device as claimed in claim 13, wherein a plurality of the striped insulating layers are arranged adjacently to one another.

15. (Original) The liquid crystal display device as claimed in claim 13, wherein the striped insulating layer is repeatedly bent by a predetermined length in a zigzag state.

16. (Original) The liquid crystal display device as claimed in claim 14, wherein a plurality of insulating layers are employed independently of one another.

17. (Cancelled)

18. (Original) The liquid crystal display device as claimed in claim 1, wherein the insulating layer comprises patterned structures.

19. (Original) The liquid crystal display device as claimed in claim 18, wherein the patterned structures are joined to one another.

20. (Original) The liquid crystal display device as claimed in claim 18, wherein the patterned structures are independent of one another.

21. (Original) The liquid crystal display device as claimed in claim 1, wherein the electrodes are arranged in the absence of slits.

22. (Original) The liquid crystal display device as claimed in claim 1, wherein the insulating layer comprises a patterned portion having slits.

23. (Original) The liquid crystal display device as claimed in claim 1, wherein the insulating layer comprises a portion which covers at least half the pixel region.

24. (Original) The liquid crystal display device as claimed in claim 1, wherein the insulating layer comprises patterned structures that correspond to pixels.

25. (Original) The liquid crystal display device as claimed in claim 1, wherein the insulating layer is provided to one of the electrodes.

26. (Original) The liquid crystal display device as claimed in claim 1, wherein the insulating layer comprises portions provided to both of the electrodes facing each other.

27. (New) The liquid crystal display device as claimed in claim 1, wherein the substrates are transparent.